

PATENT SPECIFICATION

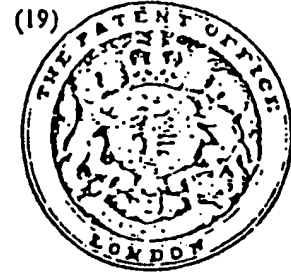
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DRAWINGS ATTACHED

1 326 263

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 8LY



(54) TRAINING AND EXERCISING APPARATUS

(71) I, ARNOLD SELNES, Huitfeldtsgt 28 Oslo 1, Norway, a Norwegian Subject, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention concerns a training apparatus, especially intended for indoor use.

Several different training apparatuses are known which are intended for indoor use. However, the majority of these apparatuses are very specialized in that it is only possible to carry out a single exercise on each apparatus. Additionally such apparatuses are often very noisy in operation.

Another disadvantage of the known training apparatuses is that they are usually very heavy and occupy a large space and in certain cases require a special room. Accordingly, such apparatuses cannot be used, for instance, in a room of a house. Further, such apparatuses occupy the same space whether in use or not.

Another inconvenience with these prior art apparatuses is that they possess one or more forms of friction elements, brakes and cog-wheels etc. These apparatuses are also very expensive to purchase and maintain.

It is an object of the present invention to provide a training apparatus which minimizes the above-mentioned disadvantages and drawbacks.

By using the apparatus of the present invention it is possible to carry out approximately 60 different exercises. Moreover, for each individual exercise a number of intermediate exercises are possible.

The apparatus of the invention makes little noise and is intended for use by any person, e.g. for athletes, handicapped people, people who are convalescing, children and average people, etc.

The apparatus of the invention is small

and lightweight and reasonably priced. There are no friction elements, brakes or cog-wheels, etc. Moreover, the apparatus can be folded up when not in use to enable easy storing thereof to be effected.

The apparatus of the present invention is so constructed that it can be utilised by any person without complex instructions being necessary.

According to the present invention, there is provided a training apparatus comprising a framework, two platforms, one end of each platform being pivotally connected to the framework, the platforms being substantially parallel to one another and being pivoted at adjacent ends, a supporting member, adjustable in length, being located between the substantially parallel platforms and being pivotally connected at one end to the framework, a crossbar being detachably fitted at the other end of the supporting member and one or more stays or cords being provided for retaining the supporting member in different desired angular positions, and/or for movably interconnecting the two platforms and/or for connecting via the crossbar to a displaceable device, when the training apparatus is in use.

The appended drawings show schematically some examples of how to make use of the apparatus. It will be apparent from the drawings how the apparatus can be used placed on the floor, as well as how it can be used hanging on a wall. The apparatus can also be adjusted and used for walk-and run training, rowing apparatus, gymnastic apparatus, push and stretch apparatus, swing or playing apparatus for children, besides constituting an excellent body exercising apparatus for both adults and children. However, it is not possible to mention all the different possibilities of the apparatus. Therefore, the description is primarily aimed at explaining the principle of the construction of the apparatus and some examples of how it functions. At all

times it is one's own body weight that constitutes the direct resistance in the apparatus.

The apparatus is in principle based on utilizing a balance arrangement. The performer can decide for himself how strenuous the exercises are to be and what groups of muscles are to be trained, accordingly from zero effort to a maximum effort can be applied. By means of the apparatus of the invention it is possible to train different groups of muscles of the body by utilizing the various different exercises possible.

15 The invention will be further illustrated, by way of example, with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of the apparatus of the invention, adjusted for a walk/run or body exercise;

Fig. 2 is a perspective view of the apparatus of the invention in a collapsed condition;

Fig. 3 is a side perspective view of the apparatus of the invention placed on the floor and being utilized for a body exercise.

Fig. 4 is a perspective view of the apparatus of the invention placed on the floor and being used as a rowing apparatus.

Fig. 5 is a perspective view of the apparatus of the invention hanging on a wall and being utilized for pull-push exercises;

Fig. 6 is a perspective view of the apparatus of the invention hanging on a wall and being utilized as a swing and for body-raising and lowering exercises;

Fig. 7 is a perspective view of the apparatus of the invention placed on the floor and being utilized for walk/run exercises;

Fig. 8 is a side view of the apparatus of the invention placed on the floor and being utilized for therapy exercises by a convalescing or handicapped person;

Fig. 9 is a perspective view and Fig. 10 is a side view of the apparatus of the invention hanging on a wall and being utilized for different body exercises; and

Figs. 11 and 12 are enlarged fragmentary views showing constructional details of the apparatus of the invention.

The apparatus shown in Fig. 1 is built up on a base or framework 1, and is preferably constructed of steel tubes. Two platforms 3 are pivotally connected to the framework 1 by axle 2. The platforms 3 are movably and adjustably interconnected by means of adjustable cords 5, a crossbar 10, and a supporting member 7, 8 adjustable in length. The supporting member 7, 8, is located between the platforms 3 and is retained in different desired positions by means of adjustable supporting stays 12. The crossbar 10 is detachably pivotally connected at 9 to the supporting member 7, 8, via revoluble bolt 17 in revoluble and rockable manner.

The cords 5 are removably attached to the platforms 3 by means of hooks 4 which pass through lugs fixed to the underside of handlebars 14. In this manner, the cords or hooks cannot fall out in training. Nevertheless, they may be easily removed when the apparatus is to be disassembled or is to be altered for other exercises. The supporting stays 12 can be fixed in the same manner.

The supporting member 7, 8 is pivotally connected to the framework 1 by axle 6. The axle 6 is rotatably located in the framework 1, and mounted thereon by means of an angle iron 15, fixed to the framework and equipped with lugs 16 that can be bent inwards (shown in detail in Figs. 11 and 12).

The framework 1 can be made in two parts (as shown in the drawings) or as a single piece. The cords 5, and the supporting stays 12, may be made of nylon or chain-cable, etc. and in known manner they can be made adjustable by means of lock-blocks or books etc. The platforms 3 are each equipped at their free end with a handlebar 14 for different arm and body exercises. The supporting member 7, 8, can be adjusted in length and fixed by means of a bolt. The crossbar 10 can be provided with movable collars 13 in order to fix the cords 5 thereto or to act as fastening elements for rolling blocks or castors, according to requirements.

Fig. 2 shows the apparatus of the invention in a collapsed condition when not in use. The crossbar 10 and part of the supporting member 8 may be positioned on opposite sides of the framework 1.

Fig. 3 shows the apparatus of the invention being utilized for a body exercise.

The apparatus as shown in Fig. 4 may be used as a rowing apparatus, in which case the supporting member 8 is equipped with a foot-support 11. The collars 13 on the crossbar 10 are then equipped with a pulley arrangement 21 and the cords 20 pass from the operator via the crossbar 10, to a rolling-seat 18 equipped with wheels. On the back edge thereof, the seat may have an elevated back section, or a suitable belt 19 which is fastened to the seat 18 to act to counteract the forces produced during the exercise. In this way the participant is prevented from sliding on the seat. It is up to the participant how much force he wants to apply in the rowing action since the resistance offered depends on the foot-force applied.

The same cords and crossbar may be used for different exercises, e.g. when the apparatus is hung up on a wall (Fig. 5), — in this case — with a connected cord 23.

The seat 18 may also be used for other exercises. It is possible to repose on the seat, and in the traditional way to roll with same forward and back. When the apparatus is

used as a gymnastic apparatus, the cords can be freed from contact with the platforms, and be equipped with a crossbar in the same way as when it is used as a swing. When the apparatus is used as a swing, the cords are provided with a seat 24 (Fig. 6). The cords run then through castors, and they are equipped with handle-bars, so that the participant can raise and lower the body.

10 Figs. 7, 8, 9 and 10 show various forms of exercise possible with the apparatus of the invention.

15 All cords and stays, as well as the supporting member are adjustable in length. It is possible to rotate the crossbar in the horizontal as well as the vertical direction, and it is removably connected to the supporting member.

WHAT I CLAIM IS:—

20 1. A training apparatus comprising a framework, two platforms, one end of each platform being pivotally connected to the framework, the platforms being substantially parallel to one another and being pivoted at adjacent ends, a supporting member, adjustable in length, being located between the substantially parallel platforms and being pivotally connected at one end to the framework, a crossbar being detachably fitted at the other end of the supporting member and one or more stays or cords being provided for retaining the supporting member in different desired angular positions, and/or for movably inter-connecting the two platforms and/or for connecting via the crossbar to a displaceable device, when the training apparatus is in use.

40 2. A training apparatus as claimed in claim 1, in which the supporting member is retained in different desired angular positions by means of adjustable stays.

3. A training apparatus as claimed in claim 1 or 2 in which the two platforms are movably interconnected by adjustable cords connected to the crossbar which is attached to the supporting member.

4. A training apparatus as claimed in any preceding claim, in which the crossbar is detachably pivotally connected to the supporting member in both the horizontal and vertical direction.

5. A training apparatus as claimed in any preceding claim in which the supporting member and the platforms are collapsible to lie in the plane of the framework.

6. A training apparatus as claimed in any preceding claim in which the platforms are provided with handlebars.

7. A training apparatus as claimed in any preceding claim, in which the platforms and the supporting member are pivotally connected to the framework by transverse axes.

8. A training apparatus as claimed in any preceding claim, in which the cords are attached to the platforms by means of hooks threaded through lugs which are fastened to the underside of the handlebars of the platforms.

9. A training apparatus as claimed in any preceding claim, in which the apparatus is utilized as a rowing apparatus, in which a rolling seat is provided equipped with cords that pass through pulleys attached to the crossbar and further that the supporting member is provided with a detachable foot support.

10. A training apparatus, substantially as hereinbefore described with reference to the drawings.

POTTS, KERR & CO.

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COMPLETE SPECIFICATION

5 SHEETS

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Sheet 1

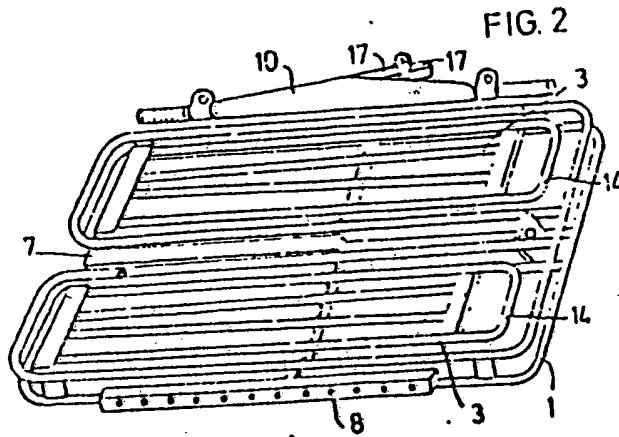
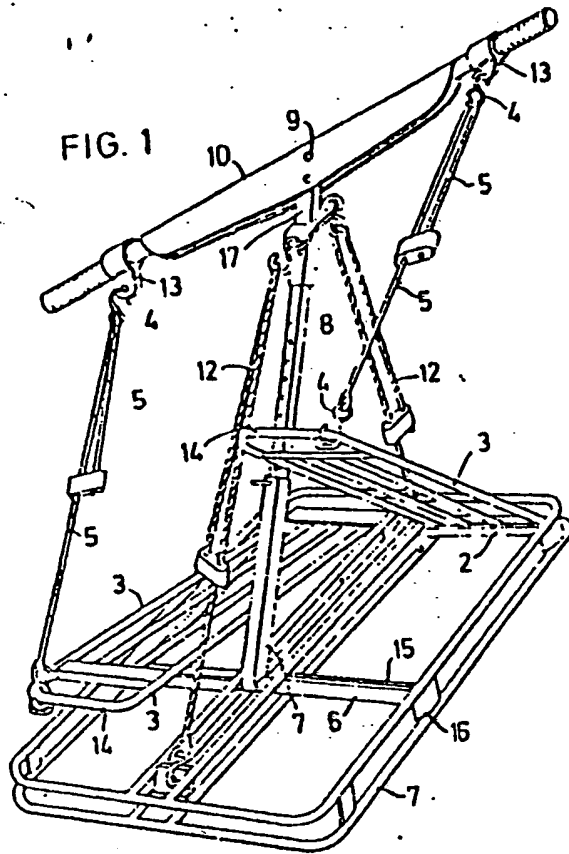


FIG. 3

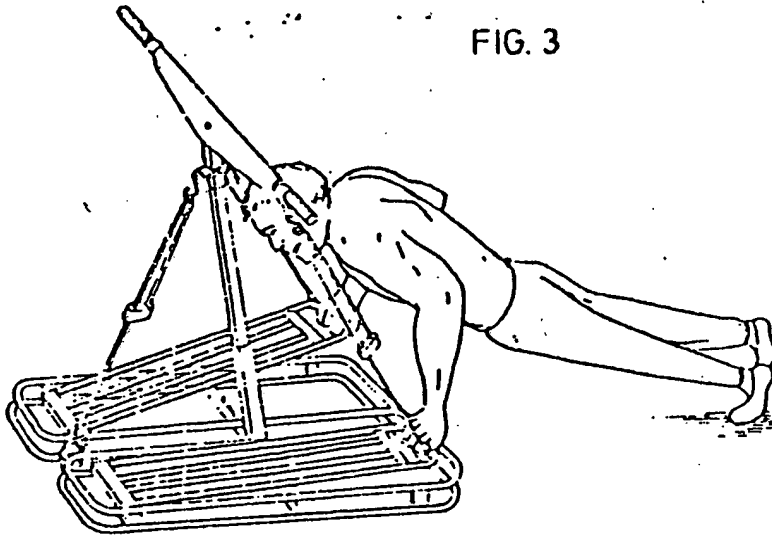


FIG. 4

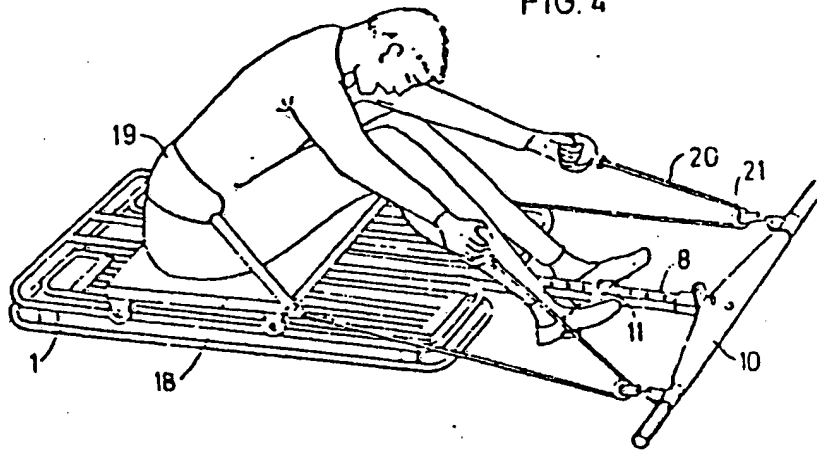


FIG. 5

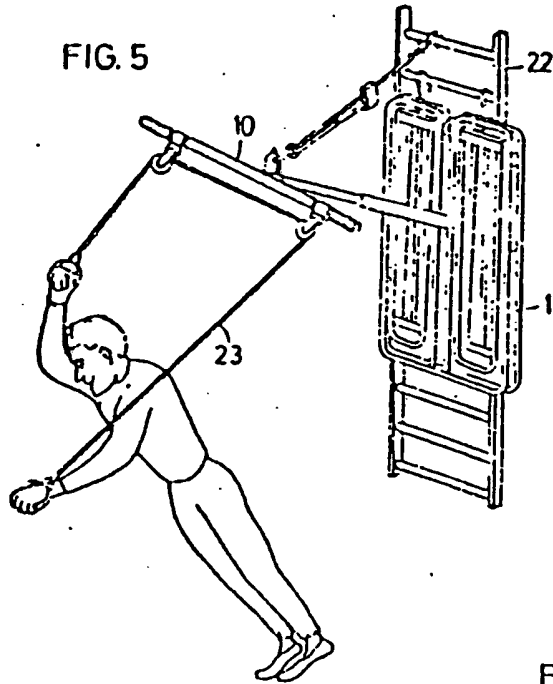


FIG. 6

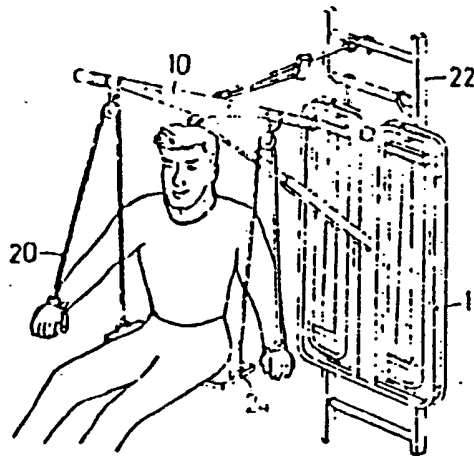


FIG. 7

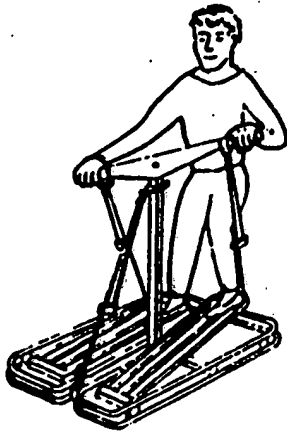


FIG. 6

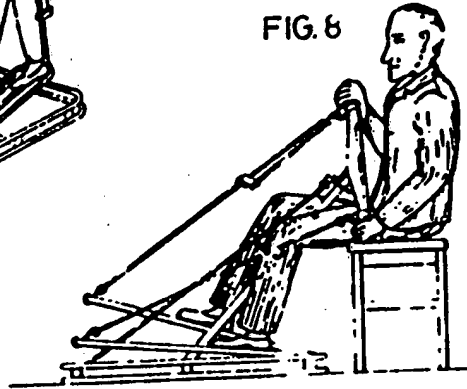
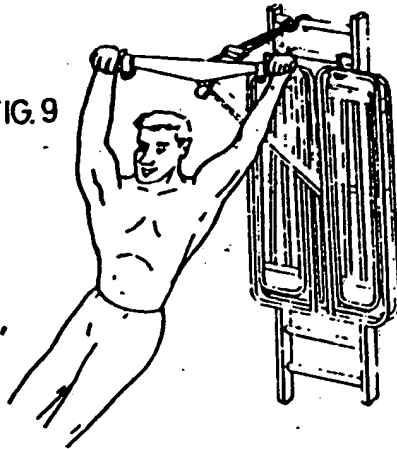


FIG. 9



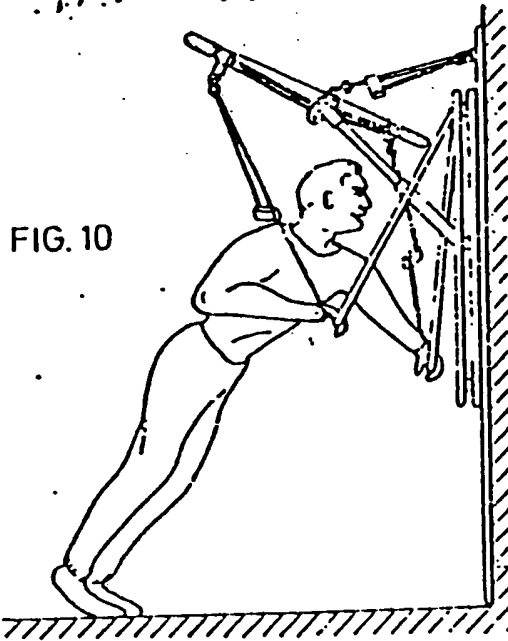


FIG. 10

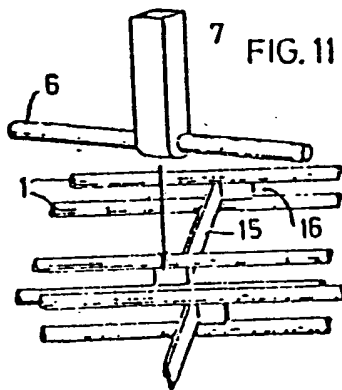


FIG. 11

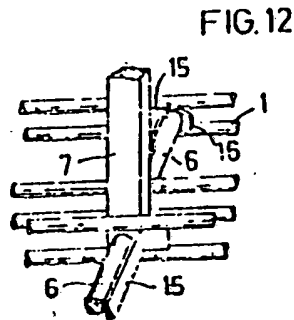


FIG. 12

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